	Application No.	**Applicant(s)**
Notice of Allowability	10/092,987	ARNOLD ET AL.
	Examiner	**Art Unit**	
	Cam Y T. Truong	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *4/25/2006*.

2. ☒ The allowed claim(s) is/are *1,3,4,6-12,14,15,17-19,21 and 23*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some*   c)☐ None of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a)☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2)☐ to Paper No./Mail Date _____.

    (b)☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

      Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

Cam Y Truong
Primary Examiner
Art Unit: 2162

DETAILED ACTION

1.   Applicant has amended claims 1, 5-10, 12, 16-18, 22-23 in the

amendment filed on 4/25/2006. Claims 1-23 are pending in this Office Action.

EXAMINER'S AMENDMENT

2.   An examiner's amendment to the record appears below. Should the

changes and/or additions be unacceptable to applicant, an amendment may be

filed as provided by 37 CFR 1.312. To ensure consideration of such an

amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone

interview with Gero G.McClellan on 7/5/2006.

In the claim: Please replace claims 1, 4, 6, 7, 12, 14-15, 17 and 18 with

amended claims 1, 4, 6, 7, 12, 14-15, 17 and 18 and canceled claims 2, 5, 13,

16, 20 and 22.

1.   (Currently amended)   A method of providing programming
assistance, comprising:

provide an integrated development environment configured to
recommend optimizations of source code;

receiving a selected fragment of source code, wherein the source code
fragment includes a source code statement that references a result of a
structured query language statement (SQL);

retrieving the SQL statement corresponding to the source code statement;

presenting a user interacting with the integrated development environment
with a recommendation for optimizing the retrieved SQL statement, relative to the
source code statement, wherein the recommendation comprises one of a
recommended SQL statement and a textual spoken language recommendation;
and

prior to retrieving the corresponding SQL statement, determining whether
the fragment of source code can be modified to be processed efficiently by
substituting the corresponding SQL statement with the recommended SQL
statement.

4.   (Currently amended)   The method of claim 1, further comprising
displaying the corresponding SQL statement and the recommended SQL
statement.

6.   (Currently Amended)   The method of claim 1, wherein the recommended SQL statement performs at least one function performed by the fragment of source code.

7.   (Currently Amended)   The method of claim 1, further comprising, prior to generating the recommended SQL statement, retrieving a database type for providing a proper syntax for the recommended SQL statement.

12.   (Currently Amended)   A computer-readable storage medium containing a program which, when executed by a processor, performs an operation for providing programming assistance for an integrated development environment, the operation comprising:

receiving a selected fragment of source code, wherein the source code fragment includes a source code statement that references a result of a structured query language statement (SQL);

retrieving the SQL statement corresponding to the source code statement;

presenting a user interacting with the integrated development environment with a recommendation for optimizing the retrieved SQL statement, relative to the source code statement, wherein the recommendation comprises one of a recommended SQL statement and a textual spoken language recommendation; and

prior to retrieving the corresponding SQL statement, determining whether the fragment of source code can be modified to be processed efficiently by

substituting the corresponding SQL statement with the recommended SQL

statement.

14.   (Currently amended)   The computer-readable storage medium of

claim 12, further comprising displaying the recommendation.

15.   (Currently amended)   The computer-readable storage medium of

claim 12, further comprising displaying the corresponding SQL statement and the

recommended SQL statement.

17.   (Currently amended)   The computer-readable storage medium of

claim 12, wherein the fragment of source code is configured to retrieve

independent fields from a database.

18.   (Currently amended) A computer for providing programming assistance,

comprising:

a memory containing a programming assistance program for an integrated

development environment to recommend optimizations of source code; and

a processor which, when executing the programming assistance program,

performs an operation comprising:

receiving a selected fragment of source code, wherein the source code

fragment includes a source code statement that references a result of a

structured query language statement (SQL);

retrieving the SQL statement corresponding to the source code statement;

presenting a user interacting with the integrated development

environment with a recommendation for optimizing the retrieved SQL statement,

relative to the source code statement, wherein the recommendation comprises

one of a recommended SQL statement and a textual spoken language

recommendation; and

prior to retrieving the corresponding SQL statement, determining whether

the fragment of source code can be modified to be processed efficiently by

substituting the corresponding SQL statement with the recommended SQL

statement.

Allowable Subject Matter

3.   Claims 1, 3-4, 6-12, 14-15, 17-19, 21, and 23 are allowed.

The prior art of record, alone or in combination, does not teach or fairly suggest

the combination of steps as recited in independent claims 1, 12 and 18 wherein

"presenting a user interacting with the integrated development environment with

a recommendation for optimizing the retrieved SQL statement, relative to the

source code statement, wherein the recommendation comprises one of a

recommended SQL statement and a textual spoken language recommendation;

and prior to retrieving the corresponding SQL statement, determining whether the

fragment of source code can be modified to be processed efficiently by

substituting the corresponding SQL statement with the recommended SQL

statement.

The dependent claims, bring definite, further limiting, and fully enabled by
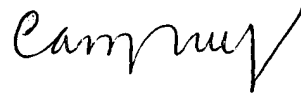
the specification are also allowed.

Contact Information

4.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Firday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cam Y Truong
Primary Examiner
Art Unit 2162
7/5/2006